



**US Army Corps  
Of Engineers**  
Wilmington District

# PUBLIC NOTICE

Issue Date: April 18, 2008  
Comment Deadline: May 19, 2008  
Corps Action ID #: SAW-2008-1254

The Wilmington District, Corps of Engineers (Corps) has received an application from Unimin Corporation, seeking Department of the Army authorization to impact approximately 6,495 linear feet of stream channel, 0.81 acre of open water, and 0.07 acre of wetland in conjunction with the development of a mine waste disposal area at the Unimin Corporation's Hawkins Mine. This project is located off of NC Highway 226 North across from the mining office north of Spruce Pine in Mitchell County, North Carolina.

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at [www.saw.usace.army.mil/wetlands](http://www.saw.usace.army.mil/wetlands)

**Applicant:** Unimin Corporation  
Mr. Mike Vencill  
7638 NC Highway 226 South  
Spruce Pine, North Carolina 28777

**Agent:** ClearWater Environmental Consultants  
Mr. R. Clement Riddle  
718 Oakland Street  
Hendersonville, North Carolina 28792

## **Authority**

The Corps will evaluate this application and decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of Section 404 of the Clean Water Act (33 U.S.C. 1344).

## **Location**

The site is located off of NC Highway 226 North near Spruce Pine in Mitchell County, North Carolina (35.9442°N, 82.0789°W). The site contains several unnamed streams with adjacent small headwater seeps and four manmade ponds. All stream channels on the site ultimately drain into the North Toe River which flows into the Nolichucky River (HUC 06010108).

## **Existing Site Conditions**

The project site consists of an operational feldspar mine and wooded areas. The site is relatively steep ranging from 2,725 feet to 3,950 feet above mean sea level (MSL). The following five habitat types were identified within the project boundary: heath bald rock outcrop, rich cove hardwood forest, pine-oak heath, emergent wetlands, and riparian forest. The following is a summary of each of the five habitat types identified on site.

### **Heath Bald Rock Outcrop**

This small xeric community is to the east of the waterfall at the bottom of the main tributary. Stunted trees such as sassafras (*Sassafras albidum*), service berry (*Amelanchier arborea*), blackgum (*Nyssa sylvatica*), sourwood (*Oxydendrum arboreum*), white pine (*Pinus strobus*), pitch pine (*Pinus rigida*), and Carolina hemlock (*Tsuga carolina*) grow in a thin mat of soil and lichens. Ericaceous shrubs such as blueberry (*Vaccinium stamineum*), doghobble (*Leucothoe axillaris*), mountain laurel (*Kalmia latifolia*), great rosebay (*Rhododendron maximum*), huckleberry (*Gaylussacia ursine*), and fetter-bush (*Leucothoe recurva*) grow in colonies. A sparse herb layer is comprised of trailing arbutus (*Epigaea repens*), coreopsis (*Coreopsis major*), and wintergreen (*Gaultheria procumbens*).

### **Rich Cove Hardwood Forest**

This mesic community was observed on moist sites in the coves and drainage ways of the perennial and intermittent streams on site. Species observed in the overstory include tulip poplar (*Liriodendron tulipifera*), red maple (*Acer rubrum*), and Canadian hemlock. Other trees observed include northern red oak (*Quercus rubra*), striped maple (*Acer pensylvanicum*), chestnut oak (*Quercus prinus*), silver maple (*Acer saccharinum*), sugar maple (*Acer saccharum*), shagbark hickory (*Carya ovata*), mockernut (*Carya tomentosa*), ash (*Fraxinus pensylvanicum*), Fraser's magnolia (*Magnolia fraseri*), and yellow buckeye (*Aesculus flava*). Plants observed in the shrub layer include mountain rosebay (*Rhododendron catawbiense*), sweet shrub (*Calycanthus floridus*), witch hazel (*Hamamelis virginiana*), and mountain laurel. Species observed in the herbaceous layer include blood root (*Sanguinaria canadensis*), Solomon's Seal (*Polygonatum biflorum*), mandarin lily (*Disporum lanuginosum*), trillium (*Trillium spp*), sarsaparilla (*Aralia racemosa*), lily (*Lilium spp*), grape fern (*Botrychium virginianum*), poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), showy orchid (*Orchis spectabilis*), rattlesnake plantain (*Goodyera pubescens*), and common greenbrier (*Smilax rotundifolia*).

### **Pine-Oak Heath**

This mesic to xeric community is found along the ridges, with sections along the central eastern and central western portions of the property. Trees species observed include white oak (*Quercus alba*), black oak (*Quercus velutina*), northern red oak, southern red oak (*Quercus falcate*), white pine, Virginia pine (*Pinus virginiana*), Carolina hemlock, and eastern hemlock (*Tsuga canadensis*). Species observed in the shrubs layer include mountain laurel, rhododendron (*Rhododendron maximum*), blueberry, and huckleberry.

### **Emergent Wetlands**

This moist to saturated community type is associated with riparian corridors and was observed in the southern sections of the property. This habitat is defined as emergent wetlands that are permanently or semi-permanently saturated. Tree species observed around the perimeter of these water bodies include red maple, yellow birch (*Betula lutea*), and black willow (*Salix nigra*). Species observed in the shrub layer include tag alder (*Alnus serrulata*) and silky willow (*Salix sericea*). Annual and perennial herbs observed on site include groundsel (*Senecio aureus*), shallow sedge (*Carex lurida*), fringed sedge (*Carex crinita*), pointed broom sedge (*Carex scoparia*), foxtail sedge (*Carex vulpinoidea*), soft rush (*Juncus effusus*), green bulrush (*Scirpus atrovirens*), spike rush (*Eleocharis obtusa*), cattail (*Typhus latifolia*), and monkey flower (*Mimulus sp.*).

### **Riparian Forest**

This habitat is varied and often contains mesophytic and hydrophytic species. Communities include tributaries in the bases of coves or at the toes of the slopes. Tree species observed along the stream banks include eastern hemlock, red maple, and tulip poplar. Shrubs observed in this habitat include rhododendron, pepperbush (*Clethra acuminata*), and spicebush (*Lindera benzoin*). Species observed in the herbaceous layer include coneflower (*Rudbeckia laciniata*), bugleweed (*Lycopus sp.*), goldenrod (*Solidago sp.*), and stiff cowbane (*Oxypolis rigidior*).

Unnamed perennial tributaries to the North Toe River traverse the site. There are approximately 9,710 linear feet of stream channel within the project boundary. In general, these tributaries flow north to south and eventually into the North Toe River. The site is approximately 1.7 miles from the North Toe River. Streams and wetlands within the northern and central portion of the property are bordered by mature riparian forest. The stream channel at the most southern portion of the property is adjacent to the existing mine; buffers along this portion of stream have been altered.

### **Applicant's Stated Purpose**

The basic project purpose of the proposed project is to provide an area to store waste by-products generated by mining activities. More specifically, the overall project purpose of the proposed project is to develop a mine waste disposal area to store by-products generated by mining activities that is within the property boundaries of the existing mine and does not require extended hauling distances.

### **Project Description**

The applicant proposes to permanently impact 6,485 linear feet of stream channel, 0.073 acres of wetlands, and 0.81 acres of open waters to achieve the previously stated project purpose through the development of the Hawkins Mine waste disposal area. Streams on site will be relocated into a newly designed channel located along the eastern property boundary.

The proposed relocation involves construction of approximately 4,495 linear feet of stream channel using natural channel design along the eastern edge of the proposed mine waste disposal area. The proposed alignment passes over steep, generally wooded terrain. Channel slopes will range from approximately 2 percent to over 25 percent, with typical slopes ranging from 13 percent to 15 percent. The existing streams exhibit a step-pool morphology typical of steep mountain streams. Grade control is present in the form of clusters of cobbles and tree roots. Maximum stream depths are generally 12 to 18 inches, and bankfull widths range from approximately 8 to 13 feet. The design channel will attempt to replicate the natural form and grade control observed in the existing streams. An upland buffer will be placed along the relocated stream reach. Vegetated buffer widths generally exceed 30 feet and in some cases exceed 100 feet from the top of bank. Some buffer widths are constrained on the east side of the project near the Hawkins Mine property boundary. Upland buffers on site will total approximately 18 acres.

The applicant's proposed mitigation for the unavoidable loss of stream channel associated with the project is twofold; on-site mitigation for the 4,495 linear feet of stream location using natural channel design techniques, and payment into the EEP in-lieu fee program for the balance of the unavoidable impacts (approximately 1,990 linear feet). By letter dated March 5, 2008, EEP has indicated they are willing to accept payment for impacts associated with the Hawkins Mine Stream Relocation project.

### **Other Required Authorizations**

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice combined with appropriate application fee at the North Carolina Division of Water Quality central office in Raleigh will constitute initial receipt of an application for a 401 Water Quality Certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, 401 Oversight and Express Permits Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to the North Carolina Division of Water Quality (NCDWQ), 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260 Attention: Ms Cyndi Karoly by May 19, 2008.

In addition, this project may be located in a watershed subject to Tennessee Valley Authority (TVA) permit requirements pursuant to Section 26a of the TVA Act. This Public Notice and all application materials are being forwarded to the Holston-Cherokee-Douglas Watershed Team, Attention: Susan B. Fuhr, Manager, 3726 E. Morris Boulevard, Morristown, TN 37813-1270. Questions or comments regarding Section 26a permit requirements should be directed to the above address.

## **Essential Fish Habitat**

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project would not adversely impact EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

## **Cultural Resources**

The Corps has consulted the latest published version of the National Register of Historic Places and is not aware that any registered properties, or properties listed as being eligible for inclusion therein are located within the project area or would be affected by the proposed work. Presently, unknown archeological, scientific, prehistoric, or historical data may be located within the project area and/or could be affected by the proposed work.

## **Endangered Species**

The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps has determined pursuant to the Endangered Species Act of 1973, that the proposed project will have no effect on federally listed endangered or threatened species or their formally designated critical habitat.

## **Evaluation**

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

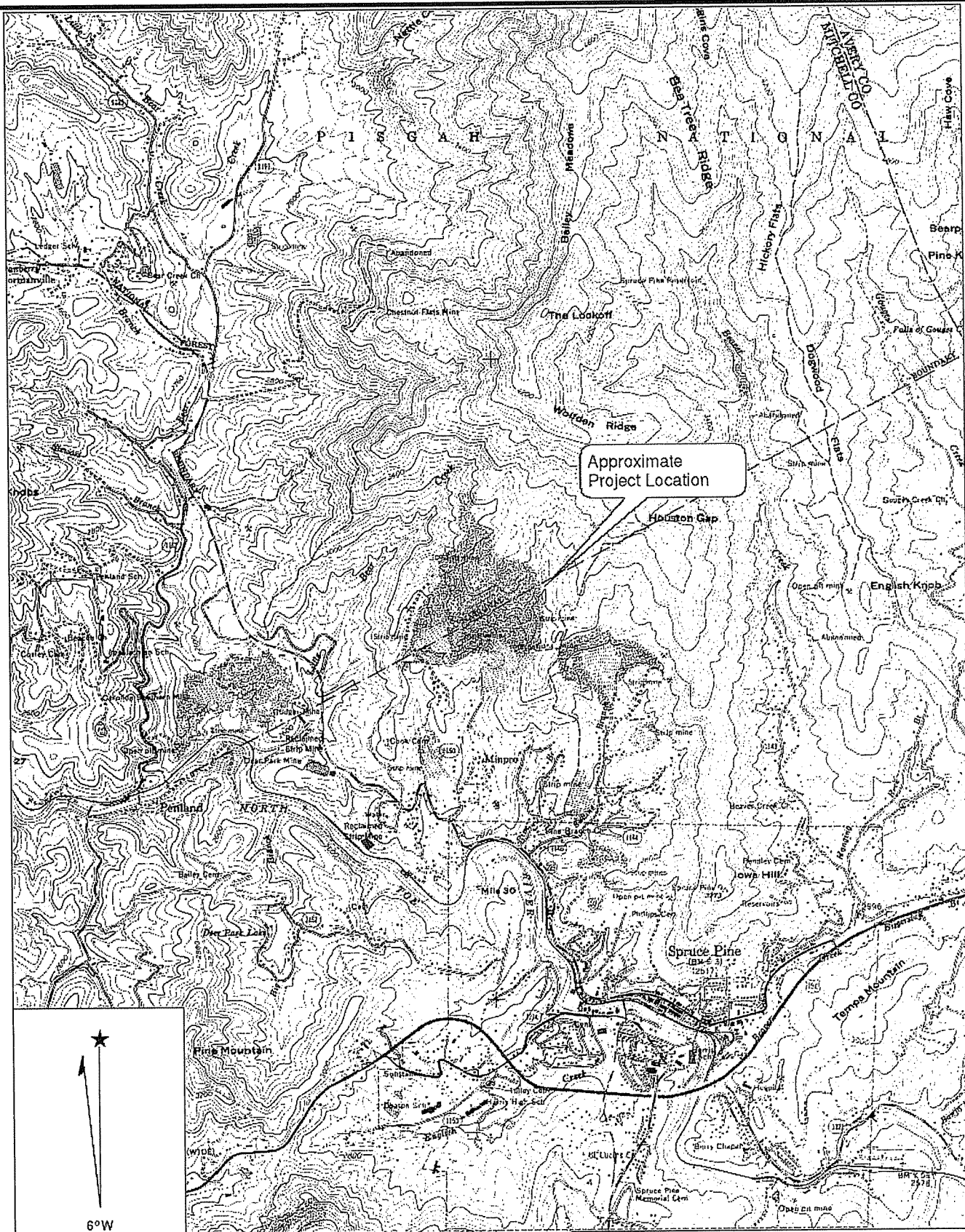
## **Commenting Information**

The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, including any consolidate State Viewpoint or written position of the Governor, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this

proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

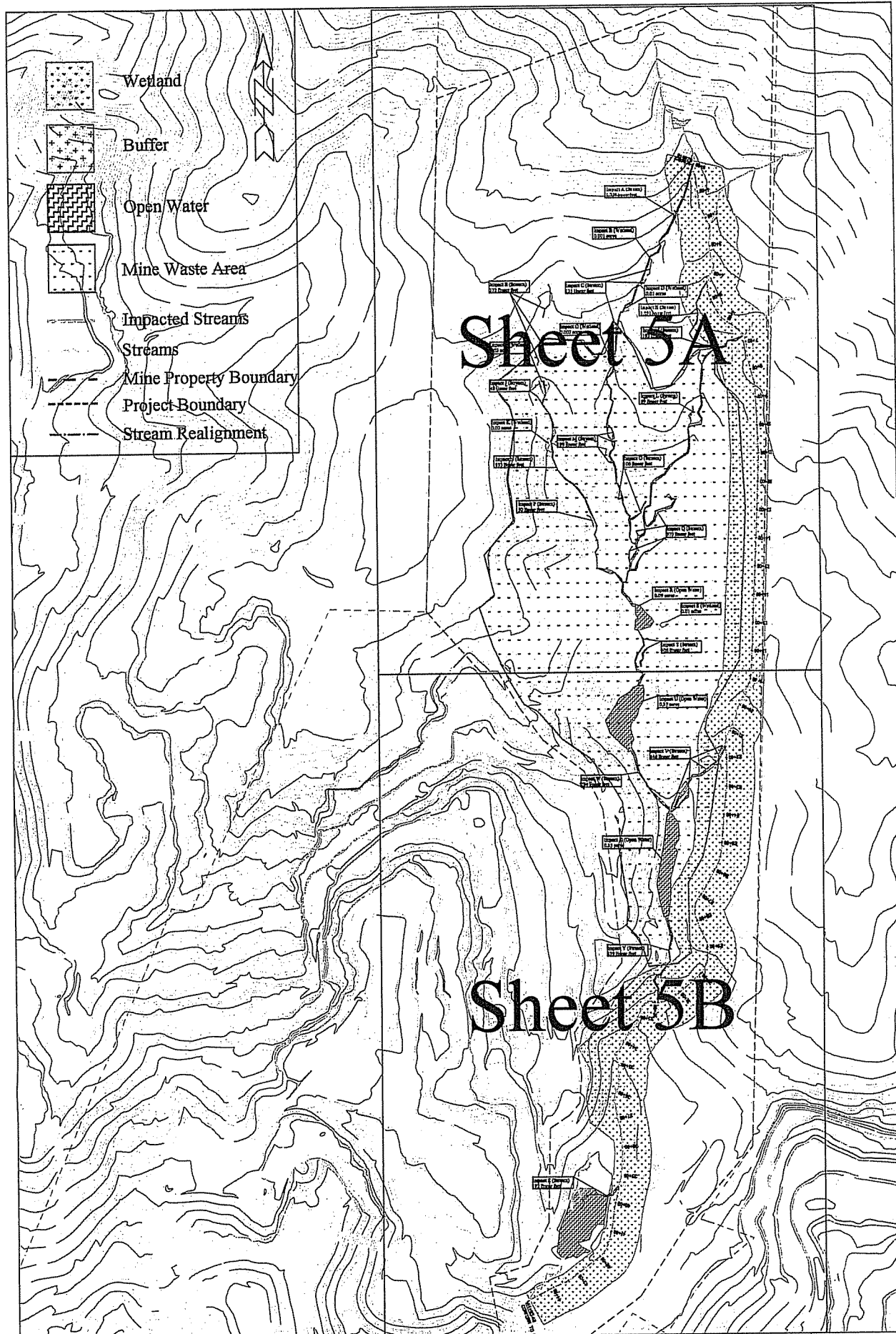
Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, May 19, 2008. Comments should be submitted to USACE, Attn: David Baker, 151 Patton Avenue Room 208, Asheville, North Carolina 28801.



Hawkins Mine  
Mitchell County  
North Carolina

**CLEARWATER**  
Environmental Consultants, Inc.  
718 Oakland Street  
Hendersonville, NC 28791  
828-698-9800

USGS Topographic Map  
Spruce Pine Quad  
Figure 2



**ClearWater**  
Environmental Consultants, Inc.

718 OAKLAND ST  
HENDERSONVILLE NC 28791  
PHONE: (828) 698-9800  
FAX: (828) 698-9003

1 INCH = 300 FEET  
DRAWN BY: CEC  
DATE: 03.05.01  
CEC PROJECT NO.: 448

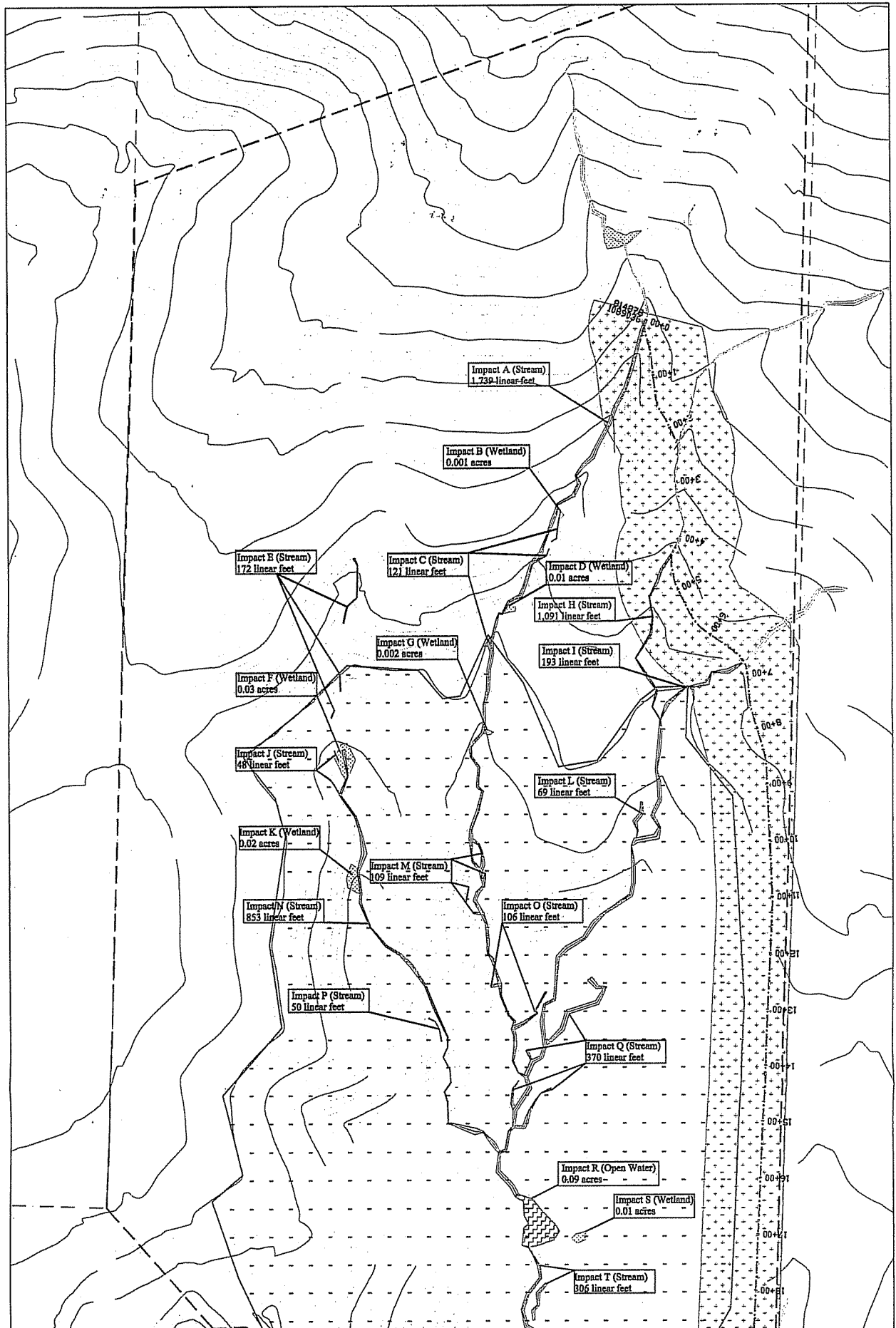
**HAWKINS MINE STREAM RELOCATION  
KEY**

THE UNIMIN CORPORATION

MITCHELL COUNTY

SHEET NO.  
**5**  
OF





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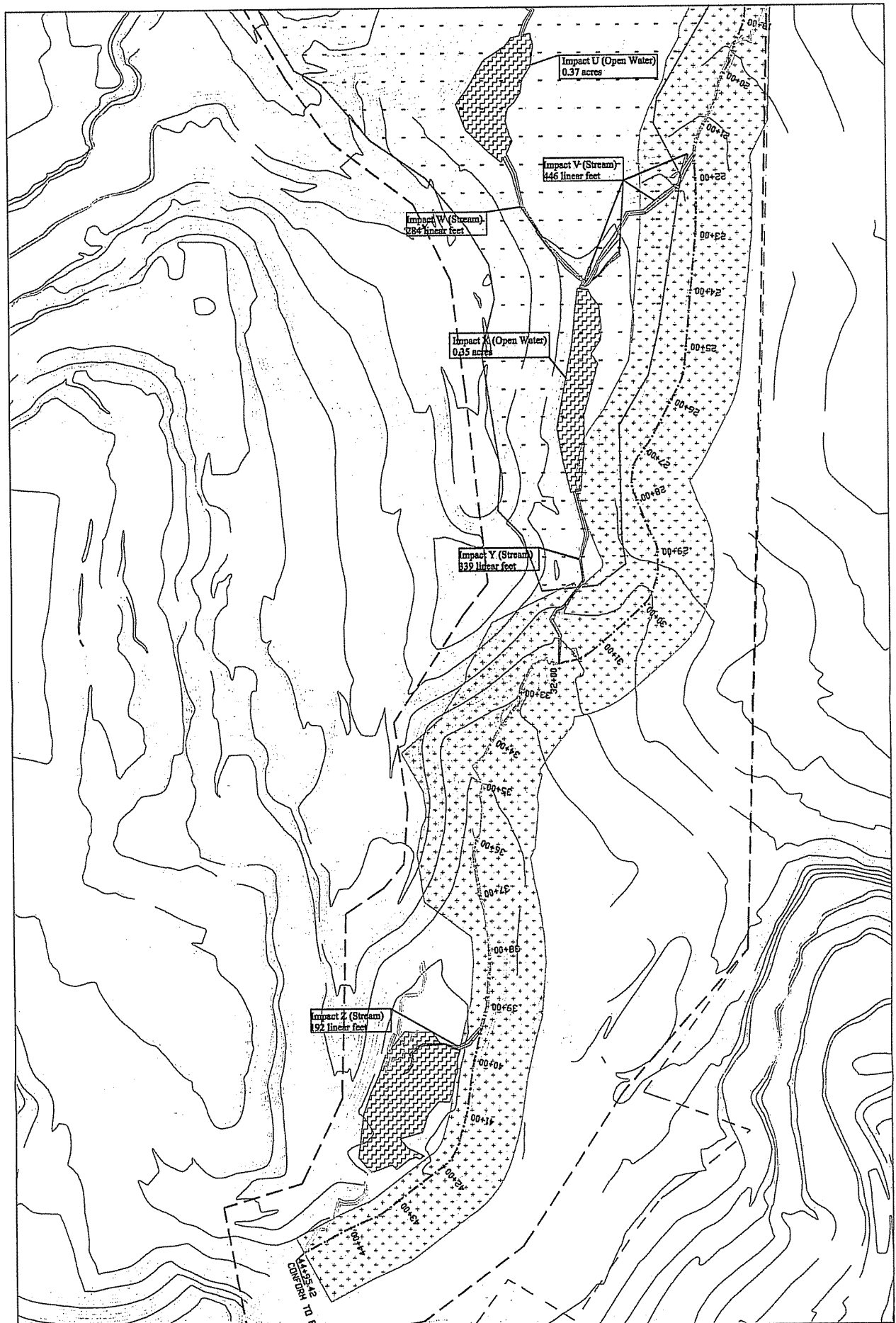
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DRAWN BY: CEC  
DATE: 03.03.08  
CEC PROJECT NO.: 438

# **HAWKINS MINE STREAM RELOCATION DETAIL**

THE UHIMIN CORPORATION

MITCHELL COUNTY

SHEET NO.  
**5A**  
OF



**ClearWater**  
Environmental Consultants, Inc.

718 OAKLAND ST  
HENDERSONVILLE NC 28791  
PHONE: (828) 698-9800  
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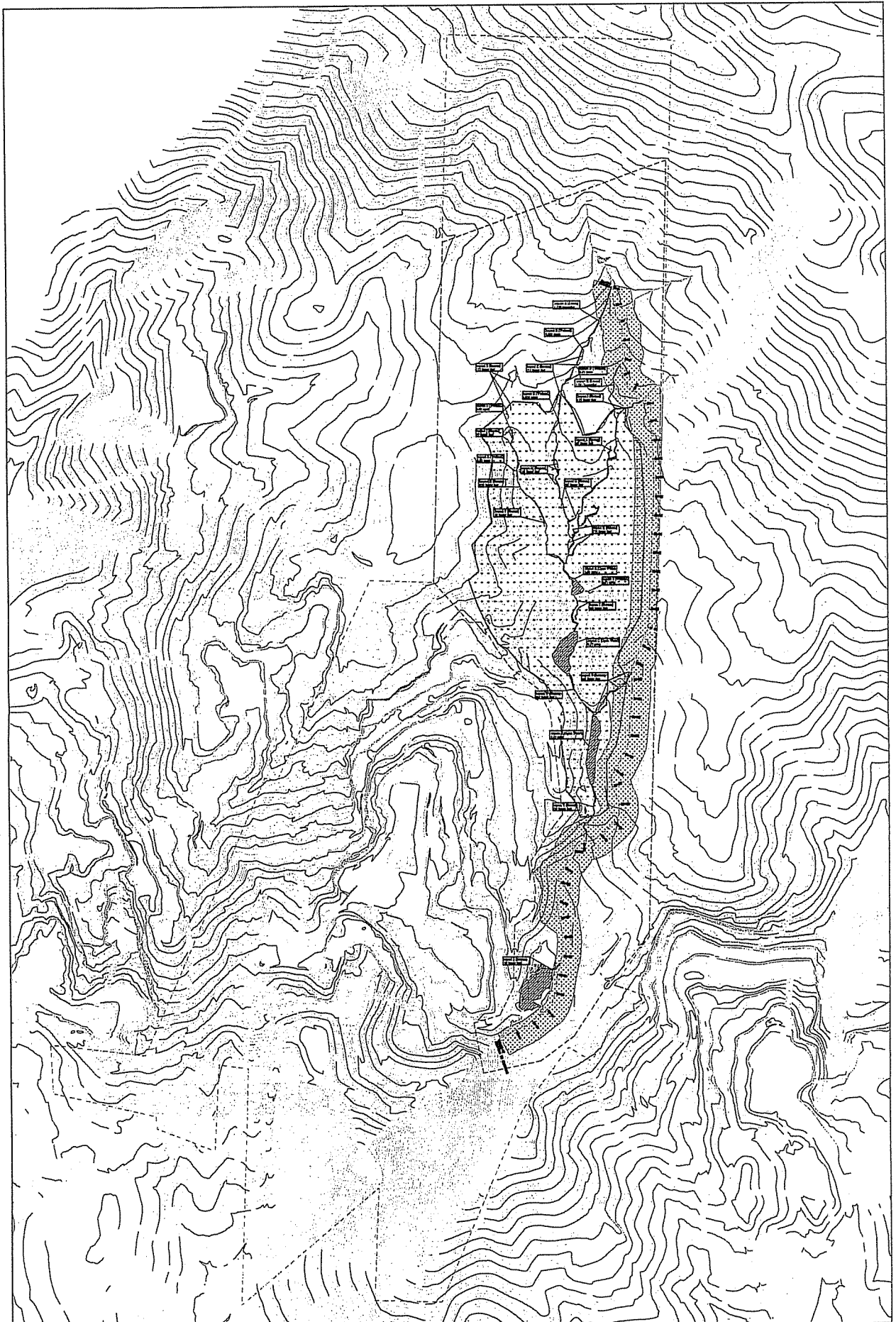
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CEC PROJECT NO.: 446

# **HAWKINS MINE STREAM RELOCATION DETAIL**

THE UNIHIN CORPORATION

MITCHELL COUNTY

SHEET NO.  
**5B**  
OF



**ClearWater**  
Environmental Consultants, Inc.

718 OAKLAND ST  
HENDERSONVILLE NC 28791  
PHONE: (828) 698-9800  
FAX: (828) 698-9003

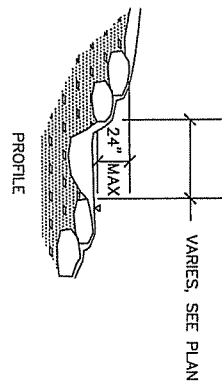
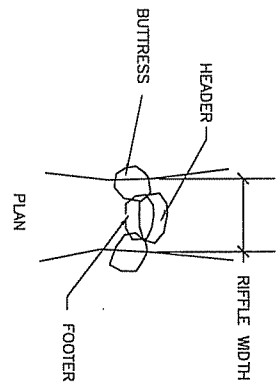
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DATE: 03.05.08  
CEC PROJECT NO.: 448

# **HAWKINS MINE STREAM RELOCATION HAWKINS MINE OVERVIEW**

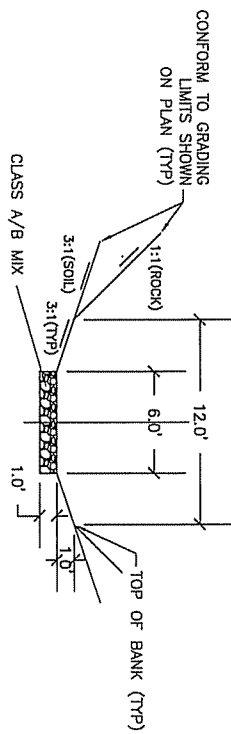
THE UNIHIN CORPORATION

MITCHELL COUNTY

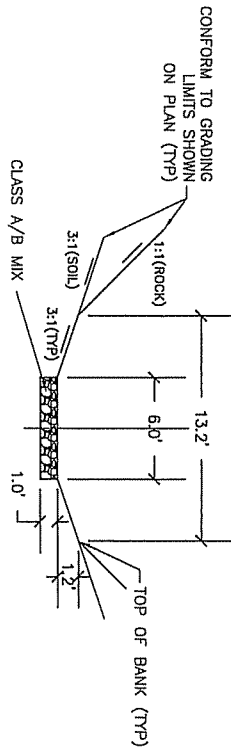
SHEET NO.  
**6**  
OF



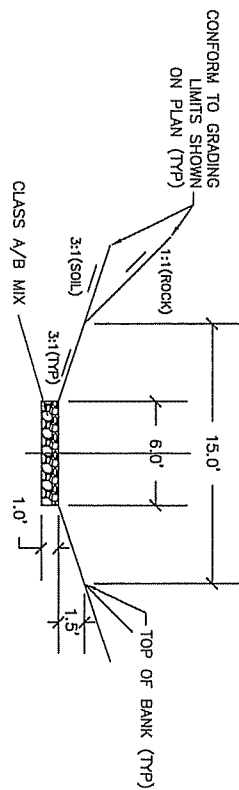
### STEP-POOL SEQUENCE DETAILS



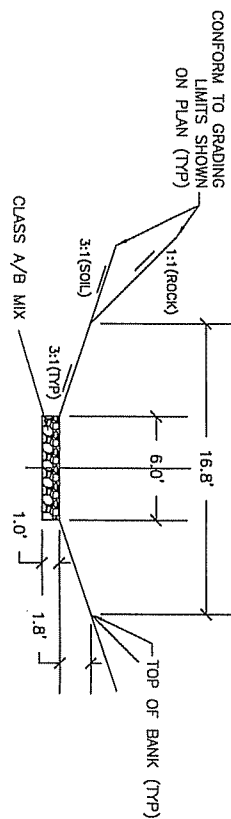
TYPICAL RIFLE SECTION - SLOPE > 10%



TYPICAL RIFLE SECTION - SLOPE < 10%



TYPICAL POOL SECTION - SLOPE > 10%



TYPICAL POOL SECTION - SLOPE < 10%

**CONFLUENCE**  
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DETAILS & TYPICALS  
STREAM RELOCATION  
SPRUCE PINE, NC  
UNIMIN CORP.

PRELIMINARY PLANS  
NOT FOR CONSTRUCTION

SCALE:	NTS
DRAWN:	ADB
CHECKED:	ADB
DATE:	02/2008
DRAWING NO:	4 OF 4